Remarks/Arguments:

Claims 1-29 are pending in the application. Claims 1-7, 10-25, 28 and 29 are rejected. Claims 8, 9, 26 and 27 are objected to. Claims 1, 2, 5, 6, 11, 18, 19, 23 and 28 are amended. No new matter has been added.

On page 2, the Official Action objects to claim 1 because the recitation of "the network" has insufficient antecedent basis. Thus, Applicants have amended claim 1 to recite "a network." Withdrawal of the objection is respectfully requested.

On page 3, the Official Action rejects claims 1, 10, 11, 18 and 19 under 35 U.S.C. § 102(b) as being anticipated by Nishikawa (U.S. 2004/0264425). It is respectfully submitted, however, that the claims are patentable over the art of record for at least the reasons set forth below.

Applicants' representatives would like to thank the Examiner for the telephone interview on October 23, 2009. During the telephone interview, Applicants' representatives explained to the Examiner that the beacon transmission period recited in claim 1 is moved when a collision from another network device is detected. Applicants also explained that Nishikawa does not teach moving the beacon transmission period. The Examiner indicated that clarification of certain language in claim 1 would help to overcome the present rejection.

Applicants' invention, as recited by claim 1, includes features which are neither disclosed nor suggested by the art of record, namely:

> **... first radio communication device detects a beacon of another network in a beacon transmission period used in a network to which the device belongs, the first radio communication device transmits a beacon ... which gives notice of a collision of the detected beacon and gives notice that the beacon transmission period is moved to a new beacon transmission period excluding the detected beacon of the other network ...**
>
> **...a step in which the first radio communication device transmits a beacon after moving in the new beacon transmission period ...**

Claim 1 relates to the detection of a beacon collision. Specifically, a radio communication device detects a beacon from a device in another network which collides in the beacon transmission period of the network. When the collision is detected, the radio communication device moves the beacon transmission period of the network. Thus, the devices in the network transmit their beacons in the new beacon transmission period. Support for this feature can be at least found in paragraphs 152-171 of the Applicants' specification. No new matter has been added.

The Official Action states that paragraphs 109, 110, 111, 124 and 127 in Nishikawa teaches a network device which moves a beacon transmission period. Applicants, however, respectfully disagree with the Examiner. The communication devices in Nishikawa avoid collisions by moving into empty slots within a beacon transmission. (the beacon transmission period does not move). In Nishikawa, for example, when STA1 wants to communicate with STA2, the reservation information of hidden station STA3 is known. Thus station STA1 utilizes the known information of station STA3 to reserve communication with STA2 without having collisions. This feature is at least supported in paragraph 111 of Nishikawa ("*It becomes possible for the STA1 to substantially know the reservation information of the hidden station STA3*").

Furthermore, in paragraphs 96, 100 and 104, Nishikawa teaches that the device moves to a time slot which avoids collisions ("*Then, the new entry station determines the transmission time of the beacon signals which the station transmits ... the new entry station selects a position (relative time) having the maximum interval during which no beacon signals are transmitted*"). Nishikawa's system is furthermore shown in Applicants' explanatory figure (enclosed). Specifically, device D moves into the beacon transmission period of network ABC having 3 occupied time slots and 2 unoccupied time slots. Once device D determines the unoccupied time slot (e.g. slot 5), device D enters the beacon transmission period of network ABC. Nishikawa's beacon transmission period, however, does not move (it stays the same).

Applicants' claim 1 is different than Nishikawa because the beacon transmission period is moved to a new beacon transmission period ("... *first radio communication device detects a beacon of another network in a beacon transmission period used in a network to which the device belongs, the first radio communication device transmits a beacon ... which gives notice of a collision of the detected beacon and give notice that the beacon transmission period is moved to a new beacon transmission period excluding the detected beacon of the other network ... a*

step in which the first radio communication device transmits a beacon after moving in the new beacon transmission period ..."). As shown in Applicants' explanatory figure enclosed, devices A, B and C are transmitting their beacons in a beacon transmission period of network ABC. When device D (from another network) moves into the beacon transmission period, it collides with the beacon of device B. Once device B detects a collision, it moves the beacon transmission period of network ABC to a new beacon transmission period. Thus, devices A, B and C move their beacon transmission period to a new beacon transmission period which does not collide with the beacon of device D. This feature is at least supported in paragraph 171 of Applicants' specification ("*When any radio communication device in a certain beacon group detects that a radio communication device of another beacon group in which a part of the BP overlaps enters, the radio communication device can notify all the radio communication devices in the same beacon group ... all the radio communication devices of the beacon group can move to a new BP which does not overlap*"). Thus, moving the beacon transmission period can avoid multiple simultaneous collisions. Accordingly, for the reasons set forth above, claim 1 is patentable over the art of record.

Claim 18 includes similar features to claim 1. Thus, claim 18 is also patentable over the art of record for at least the reasons set forth above with respect to claim 1.

Claims 10, 11 and 19 are also patentable over the art of record due to their dependency on allowable claims 1 and 18.

On page 5, the Official Action rejects claims 2 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Nishikawa in view of Tobagi (U.S. 4,503,533). Tobagi, however, does not make up for the deficiencies of Nishikawa. Thus, claims 2 and 12 are also patentable over the art of record due to their dependency on allowable claim 1.

On page 6, the Official Action rejects claims 3, 4, 13 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Nishikawa in view of Tobagi and further in view of Ben-Michael (U.S. 5,339,313). Tobagi and Ben-Michael, however, do not make up for deficiencies of Nishikawa. Thus, claims 3, 4, 13 and 16 are patentable due to their dependency on allowable claim 1.

On page 7, the Official Action rejects claims 6, 14, 24 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Nishikawa in view of Garcia-Luna-Aceves (U.S. 2002/0080768). Garcia-Luna-Aceves, however, does not make up for the deficiencies of Nishikawa. Thus, claims 6, 14, 24 and 28 are patentable due to their dependency on allowable claims 1 and 18.

On page 8, the Official Action rejects claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Nishikawa in view of Suzuki (U.S. 5,652,752). Suzuki, however, does not make up for the deficiencies of Nishikawa. Thus, claim 20 is patentable over the art of record due to its dependency on allowable claim 18.

On page 8, the Official Action rejects claims 7, 15 and 25 under 35 U.S.C. § 103(a) as being unpatentable over Nishikawa in view of Garcia-Luna-Aceves and further in view of Suzuki. Garcia-Luna-Aceves and Suzuki, however, do not make up for the deficiencies of Nishikawa. Thus, claims 7, 15 and 25 are also patentable over the art of record due to their dependency on allowable claims 1 and 18.

On page 9, the Official Action rejects claims 5 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Nishikawa in view of Watanabe (U.S. 6,791,996). Watanabe, however, does not make up for the deficiencies of Nishikawa. Thus, claims 5 and 23 are patentable over the art of record due to their dependency on allowable claims 1 and 18.

On page 9, the Official Action rejects claims 17, 21 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Nishikawa in view of Suzuki and further in view of Ben-Michael. Suzuki and Ben-Michael, however, do not make up for the deficiencies of Nishikawa. Thus, claims 17, 21 and 22 are patentable due to their dependency on allowable claims 1 and 18.

On page 10, the Official Action rejects claim 29 under 35 U.S.C. § 103(a) as being unpatentable over Nishikawa in view of Fike Jr (U.S. 6,061,737). Fike Jr, however, does not make up for the deficiencies of Nishikawa. Thus, claim 29 is also patentable over the art of record due to its dependency on allowable claim 18.

In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance which action is respectfully requested.

Respectfully submitted,

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LEA/dmw

Attachment: Explanatory Figure

Dated: October 27, 2009

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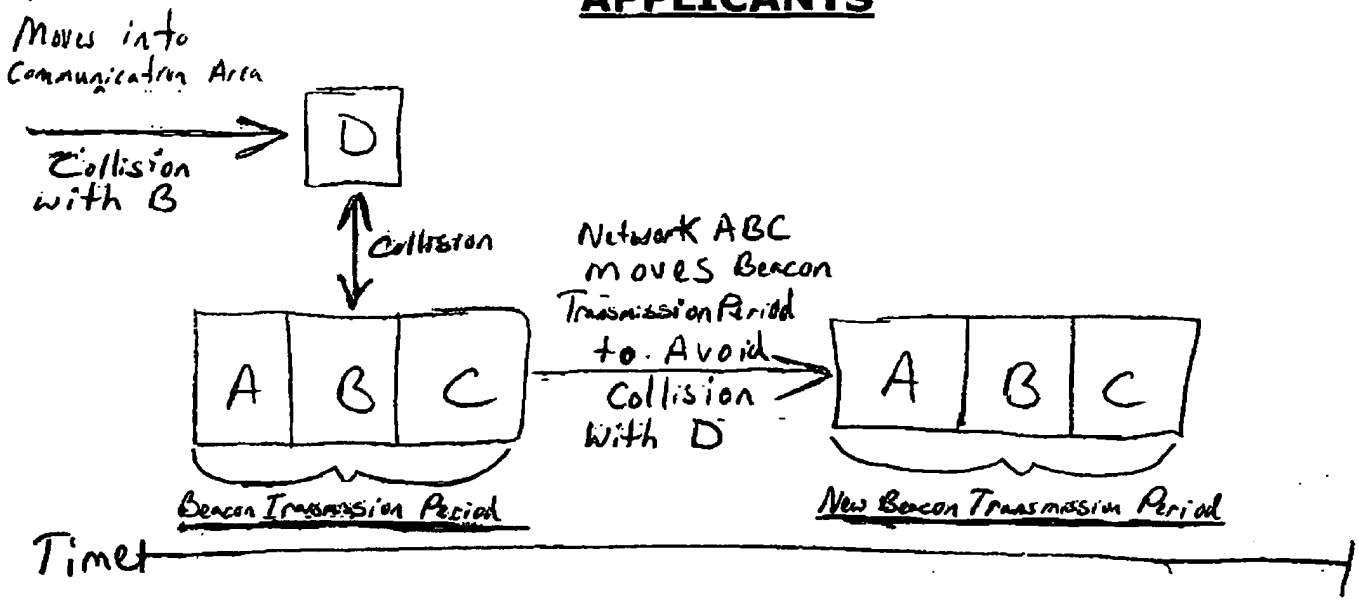
I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office on October 27, 2009.

Lawrence E. Ashery, Reg. No. 34,515

APPLICANTS



EXAMPLE

NISHIKAWA

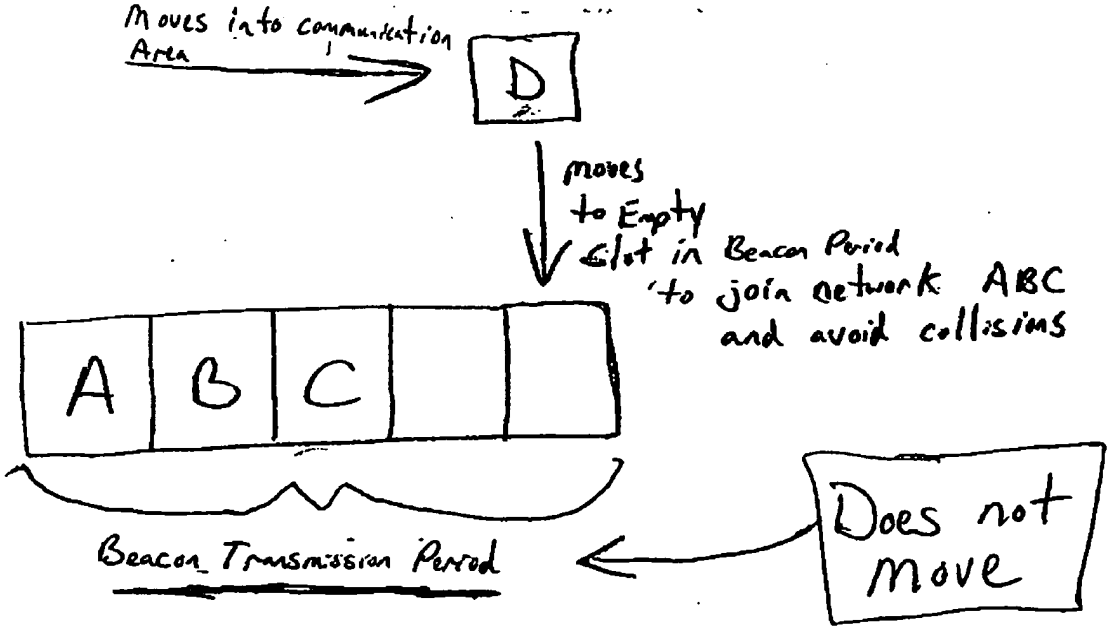


EXHIBIT - (DO NOT ENTER)